中華民國模擬航管組織 航管作業手冊

修訂紀錄

版次	修訂日期	修訂概述	修訂人	備註
1	2009/10/15	新建	Ming	
2	2009/10/21	新增 2.1 一般管制作業通則 同時修改其他章節編號	Ming	
		新增 2.7 ATIS 播報原則	Ming	
3	2011/2/7	修改2.2許可頒發程序及許可限制點表單	Ming	
4	2011/7/1	新增 2.3 席位分區使用之代號	Ming	

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1. 通則

1.1. 依據:

中華民國模擬航管組織(以下稱 VATROC)航管作業手冊係參照中華民國民用 航空局頒布之飛航規則、飛航管制程序及飛航指南,並因應模擬管制所需之 作業編寫。本作業程序僅列入除一般管制程序之外,本區所需套用之管制程 序。管制員仍需熟悉飛航管制程序與 VATSIM 之 code of conduct 所列之規範。

1.2. 適用範圍:

本手冊僅適用於 VATROC 所屬管制員或經 VATROC 認可之客座管制員 (visiting controller)於臺北飛航情報區提供之飛航管制服務。嚴禁運用於真實世界之飛航管制或飛航操作。

1.3. 席位執掌:

1.3.1. 機場管制:

- (1)、負責提供服務機場之儀器飛航航空器許可頒發、所有航空器地面滑行及離到場航機起降之管制。
- (2)、負責提供服務機場之機場航線上目視航空器管制,或通過服務機場空域 且經近場臺授權之目視過境航空器。
- (3)、負責指定 VRC 雷達電碼,並將航機異於申請高度之指定高度輸入 VRC 系統。

(4)、負責服務機場 ATIS 之錄製。

1.3.2. 近場管制

- (1)、負責提供服務機場之近場臺空域內,兩萬呎以下之離到場航機之航管服務。近場臺空域得依循 AIP 劃定區域或管制員自行協調。
- (2)、負責離場航機之放行,或授權塔臺自動放行,及到場航機之排序。
- (3)、負責管制空域內目視航空器航管服務或航情諮詢。
- (4)、服務機場無塔臺管制時,負責提供該機場之機場管制服務。
- (5)、視需要向鄰區或區域管制席提出流量管制之需求。
- (6)、除機場管制提供降落機場之 ATIS 外,應依 2.6 提供到場航空器降落機場之天氣資料。

1.3.3. 區域管制:

- (1)、負責提供過境航空器、離到場航空器於航路、儀器離場航線、儀器到場 航線、過渡航線上且於近場臺空域高度外之航空器航管服務。
- (2)、當鄰區管制員提供服務時,負責協調交管之間隔。
- (3)、依據近場臺之協調安排到場航空器之交管間隔。
- (4)、視近場臺需要協調各機場或鄰區實施流量管制。
- (5)、無近場管制席時,提供近場管制服務及當時無塔臺之機場管制服務。 (以下空白)

2. 航管作業程序

2.1. 一般管制作業通則:

- 2.1.1. 除本手冊另有規定外,管制作業之程序及標準皆依據經編修適用於中華民國 航管組織飛航規則、飛航管理程序為標準。
- 2.1.2. 管制使用語言為英文及中文,不得強制飛行員使用英文通話。
- 2.1.3. 除使用文字管制能加速航空器流量減少等待延誤外,所有管制員皆以提供語音服務為主。唯管制員不得強制飛行員使用語音。
- 2.1.4. 管制員間之協調得使用 CHAT BOX 以文字溝通,或使用 VRC 內建之 INTERCOM/OVERRIDE 等內線語音通話功能。

2.1.5. 適用隔離:

- 2.1.5.1. 機場管制席:目視隔離/目視航空器與其他航空器 500 呎垂直隔離
- 2.1.5.2. 近場管制席:三浬雷達隔離(主要機場 40 浬內、FL180 以下)/五浬雷達隔離(主要機場 40 浬外或 FL180 以上)/一千呎垂直隔離/目視隔離
- 2.1.5.3. 區域管制席: 五浬雷達隔離/一千呎垂直隔離/目視隔離

2.2. 離場航空器許可頒發程序:

- 2.2.1. 不論是否有區域管制席或近場管制席提供服務,為簡化許可頒發流程,本區 授權塔臺依據本程序自行頒發航管許可。區域管制席或近場管制席得要求塔 臺於航機申請許可時口頭或以文字訊息通知。
- 2.2.2. 塔臺頒發臺灣桃園機場之離場程序前應檢查航機飛行計畫所簽裝備,若非/Q、/G、/E、/F等代字,應詢問是否具 RNAV 飛航能力,若航機報告不具此能力,應改發傳統離場程序,同時應將資料修改至航機飛行計畫並口頭(或文字訊息)告知近場管制席。
- 2.2.3. 國內線:塔臺依據航機請求高度頒發航管許可,並自行依各機場之電碼分配程序(表一)指定雷達電碼之前兩碼。離場程序及許可限制點依據表二頒發。 航機口頭請求高度異於飛行計畫申請高度時,塔臺應修改飛行計畫內之申請高度。
- 2.2.4. 國際線(區域管制席提供服務):所有離場航機皆頒發保持5000,不需要頒發預計高度位置。塔臺應將航機請求之高度輸入飛行計畫。即使近場管制席提供服務仍依照此模式。近場管制席提供服務時,於接管航機後爬高至與區域管制席協議之交管高度後交管予區域管制席,由區域管制席依照先到先服務原則及當時航空器相對關係安排適當巡航高度。
- 2.2.5. 國際線(無區域管制席): 塔臺依據航空器請求航線航行方向之適當巡航空層, 低於 FL290 或高於 FL410 依飛航規則之巡航制, FL290 至 FL410 間依

表三所列,直接頒發巡航高度。若區域管制席於管制途中上線提供服務,已 離場航機由區域管制中心自行重新調整,尚未離場航機則依據 2.1.4 修正離 場高度。

表一:雷達電碼之分配及用途(AIP 1.6.3.6)

電碼	用途
26xx/62xx(40-77)	國際線離場航機
43xx/44xx	臺北終端管制區離場航機
20xx/21xx/46xx	臺中終端管制區離場航機
10xx/11xx	高雄終端管制區離場航機
03xx	花蓮終端管制區離場航機
15xx	臺東終端管制區離場航機
06xx	FL200(含)以下之目視飛航
45xx	臺北區管中心國內離場航機
7500	劫機訊號
7600	無線電失效
7700	緊急情況

表二:本島機場優先離到場程序及許可限制點

排 1百		離		,	場			到	場
機場	離場	程点	F /	銜	接	航	路	許可限制點	航路/到場程序
RCTP (R05/06)	AJ1M. AJ1T.7 NP1K.	ΓΝΝ M750							M750.TG1A W4/A577.SA1A
RNAV	NP1P.A1 NP1B.R583 NP1G.R595 NP1T.B591.HCN PA1A.L3.VIOLA			JAMMY	B576.BK1A A1.AN1A R595.GR1A				
RCTP (R23/24) RNAV	AJ1M. AJ1T.7 OT1K. OT1P.	MKG TNN M750 A1						AUGUR	M750.TG1B W4/A577.SA1B
注意裝備代字	OT1G. OT1T. PA1B.	OT1B.R583 OT1G.R595 OT1T.B591.HCN PA1B.L3.VIOLA					B576.BK1B A1.AN1B R595.GR1B		
RCTP	SU1M SU1T.	TNN	KIT	MΩ	IKA	\ M7	50	JAMMY	A1.MKG.MK1A W4.AL1A A577.mn1a
(R05/06) NON-RNAV	FB1.R583.KIKIT.MOLKA.M750 FB1.G587.BULAN.A1 FB1.R583/R595/B591/B576			JAMMY	B576/A1/R595. APU.AU1A				
RCTP	SU1M SU1T. AP1.R	TNN	KIT	.MO)LK/	4.M7	'50	AUGUR	A1.MKG.MK1B W4.AL1B A577.MN1B
(R23/24) NON-RNAV			7.BULAN.A1 3/R595/B591/B576			APU	B576/A1/R595		
RCSS (R10)	MU1H MU1Q MU1R ST1A. ST1T.V	.MKG .W4(10 W2/W W4; S	100 00 or 8; S Γ1Μ	or al abo T1W .MK	bove ve, F V.B5 (G(J	e,PROP PROP 591 ET)	OP)	ZONLI	A1/W4.HL1Z B591/J3.IL1Z APU.AU1Z

	KE1M.M750		
RCSS (R28)	SL1H.HLG(100 or below,PROP) PA1V.L3.R596/B591/B576 PE1A.W2/W8 PE1A.R583.PABSOMOLKA PE1T.B591 PE1T.W4; PE1M.MKG(JET)	BESOM	A1/W4.HL1B R596.KD1B A1.AA1B B576.BA1B W2.CA1B W8.APU.AU1B B591/J3.IL1B
RCKH (R09)	SK1L.TNN HN1.HCN PR1.A577/G581	KIZIN	TNN.SN1K HCN.HC1K G581.PC1K A577.PR1K
RCKH (R27)	SX1T.TNN SX1H.HCN SX1P.G581/A577	FORKY	TNN.SN1F HCN.HC1F G581.PC1F A577.PR1F
RCBS	KU1.W6(R06) TW1.W6(R24)	SANDY	W6.SANDY
RCFN	CC1.J3.YILAN(150or above,JET) TC4.B591.(NORTH BOUND) TN5.B591.(SOUTH BOUND)	GID	B591.GID
DOM	HP1.W4.HLG	HOUPI	HLG.W4.HOUPI
RCKU	PA3.TNN(R18) TP1.TNN(R36)	TNN	HCN.W4.TNN W6.TNN
RCMQ	HG1.HLG HO1.A1.MKG TL1.W4.TNN	FATAN	W4.FATAN
RCMT	MD1A.W2/W8	NK NDB	W2/28.NK
RCNN	AI1.TNN(R36) KL1T.TNN(R18) KL1W.W6.MKG(R18) CB3H.HCN CB3P.G581/A577	TNN	W4/W6.TNN
RCQC	CR1.W6.SANDY(NW BOUND) SW2.A1.HLG(NE BOUND)	MKG	A1.MKG W6.MKG

	RK1.A1.ELATO(SW BOUND) TR1.W6.TNN(SE BOUND)		
RCSQ	RCSQ EB1T.TNN OC1Q.HCN		TNN.SN1X HCN DIRECT
*RCDC	HI1T.TNN OC1H.HCN	WANSO	TNN.SN1W HCN DIRECT
	TH2.TINHO.B591(N BOUND)	MEZZO (from NE)	L2.POLKA.PK1 B591.WA1
RCYU	WG2.B591.GID(S BOUND)	SUROT (from SE)	B591.WAGON 預計 NDB/DME-M or 雷達引導 LDA/DME
**RCFG	HA1.W8 HX1.W2	NK	W2/W8.PT1 目視機場或飛行員請 求時取消 IFR
RCKW	HC1D.HCN.W4/B591	HOWAN	TNN.W4.FA1A HCN.HC1H 目視機場或飛行員請 求時取消 IFR
RCWA	VED 触担仫沼磁佯的共可	MKG	目視機場或飛行員請
RCCM	VFR 離場後頒發儀航許可	IVING	求時取消 IFR
RCGI	VFR	CID	目視機場或飛行員請
RCLY	或 VFR 離場後頒發儀航許可	GID	求時取消 IFR

^{**}RCDC 於真實環境已無民航機服務, VRC 之 SECTOR 檔亦無地圖,請參照 2.5 無 SECTOR 檔機場作業程序提供管制服務。

^{**}FS2004 使用者需安裝 EL FORMOSA 場景檔始可飛航 RCFG

^{**}FS2004 及 FSX 需安裝 HLG 修正檔始可使用 HL1Z 到場

表三:台北飛航情報區 FL290 至 FL410 巡航空層表(AIP 1.8.8)

B576 SALMI	A1 BULAN ELATO	M750 ENVAR MOLKA	R583 BORDO	R595 SEDKU	G581 IGURU	B348 POTIB	N892 KABAM	G86 KAPLI	G581 M750 DADON
7	2	77	2 R	2 R	2 R	2	R	27	71
410		410	410	410	410	410		410	410
400	400		400	400	400		400	400	
390		390	390	390	390	390	390	390	390
380	380		380	380	380	380		380	
370		370	370	370	370	370		370	370
360	360			360	360		360		
350		350	350	350	350	350	350		350
340	340			340	340	340		340	
330		330	330	330	330	330		330	330
320	320			320	320		320		
310		310	310	310	310	310	310		310
300	300			300	300	300		300	
		290	290	290	290	290		290	290

1. 西向經由ELATO進入香港飛航情報區之航空器其目的地僅限香港、澳門及大陸;其他西向經由台北飛航情報區過境香港飛航情報區之航機由KAPLI出管。

Westbound traffic entering the Hong Kong FIR via ELATO shall be restricted to flights for Hong Kong, Macao and Mainland. Other westbound transiting flights from Taipei FIR to Hong Kong FIR shall route via KAPLI.

- 2. 經由R583航路西向過境本區之航空器僅限於飛航空層380或以上。
 - Westbound transit flight on R583 are authorized only at FL380 or above.
- 3. 航路B348飛航空層290僅供經由POTIB進管目的地爲本區機場之航空器使用。 FL290 by POTIB on B348 is for flights landing Taipei FIR.

2.3. 管制席位空域劃分及協調

2.3.1. 機場管制席:

- 2.3.1.1. 機場管制席之呼號應使用 XXXX_TWR,若區分地面管制及許可頒發席時則使用 XXXX_GND、XXXX_DEL。同時設定於 VRC 語音頻道內之CHANNEL 名稱應與使用呼號相同,以利督導管制員或教官方便設定監聽。若須區分更多席位,則以 A 至 Z 順序,例如 XXXX_A_GND、XXXX_B_GND之方式區分,其餘以此類推。
- 2.3.1.2. 機場管制席之 VRC 監控範圍請設定於 30NM,可設定多重 VIS 提升監控範圍。
- 2.3.1.3. 機場管制席於工作負擔許可時,得服務其他機場塔台空域,但注意 VIS 設定可能使飛行員無法取得聯繫。
- 2.3.1.4. 機場管制席僅可管制機場航線之目視航空器、過境機場空域之目視航空器,以及近場管制席以頒發進場許可後交接之儀器到場航空器。
- 2.3.1.5. 對於離場航空器之放行,機場管制席應於席位開始時協調近場管制席 (區域管制席服務但無近場管制時,協調區域管制席)對於離場航空器是否需要 請求放行(REQUEST RELEASE)。近場管制席或區域管制席得同意塔台自動放 行離場航機,必要時得要求塔台進行事先通報,或附加相關限制,例如離場 間隔時間或離場初始高度。
- 2.3.1.6. 塔台儘可能於離場航機滾行時開始實施 VRC 系統管制權之交接。

2.3.2. 近場管制席

2.3.2.1. 近場管制席之呼號應使用 XXXX_APP。因應民航局目前雖仍分為台北、台中、高雄、台東、花蓮、馬公、金門、馬祖終端管制區,但所有無線電呼號已統一為「台北近場管制」及「高雄近場管制」兩區。為避免航機混淆,管制員應使用下列代號及呼號表登入系統,並請注意語音頻道設定應與使用代號一致。

台北近場台 以下呼號 Taipei Approach						
管轄機場	使用代號	席位名稱 使用頻率		備註		
D.C.T.D.	RCTP_S_APP	桃園南區	125.100	桃園主頻率		
RCTP	RCTP_N_APP	桃園北區	124.200			
D.C.C.C.	RCTP_W_APP	松山西區	119.700	松山主頻率		
RCSS	RCTP_W_APP	松山東區	119.600			
RCMQ	RCTP_M_APP	台中席	130.100			
RCYU	RCTP_Y_APP	花蓮席	124.00			
	高雄近場台	以下呼號 Kaohsi	ung Approach			
RCKH	RCKH_K_APP	高雄席	124.700	兼管 RCNN		
RCQC	RCKH_Q_APP	馬公席	128.100	兼管 RCKU		
RCBS	RCKH_B_APP	金門席	124.600			
RCFN	RCKH_F_APP	台東席	119.400			

- 2.3.2.2. 近場管制席空域依據 VRC 內以區分之近場管制席空域為依據。服務高度為 1200ft AGL 至 FL200。 VIS 監控範圍請設定 80 浬。
- 2.3.2.3. 近場管制席得依據工作量,儘管制劃分空域內之航空器,其他管制席若未獲得該管制席同意,不得強制該席位接管其空域外之航空器。
- 2.3.2.4. 近場管制席提供服務前,應和鄰區協調交接位置及高度。通常實施雷達交接位置為進入他人空域前 10-15 浬,或即將離開空域高度前 3000 至 5000 呎。但實施雷達交接時應注意潛在衝突是否已經消除。
- 2.3.2.5. 近場管制席應與塔臺協調使用跑道,使用跑道方向為塔臺之權責,近場管制席應配合為之。若近場臺需使用異於 2.1 許可頒發程序所列之離到場程序時,應主動告知塔臺。
- 2.3.2.6. 近場臺得授權塔臺自動放行離場航機,但必要時得加諸限制,例如: 離場都保持五千、同向離場航空器間隔 4 分鐘一架。
- 2.3.2.7. 進場程序以 ILS 為優先選擇,近場席可使用 SCRATCH PAD 功能將進場程序輸入,減少口頭協調。

2.3.3. 區域管制席

2.3.3.1. 區域管制席之呼號應使 TPE_X_CTR。X 可使用 W、L、S、E 及 N,分別區分為西部、海峽席、南部、東部及北部,詳見下表。上線順序亦建議依照上列順序登入,唯管制員可自行協調。VRC 語音 CHANNEL 內之頻道亦

應與呼號相同。請注意,本區不使用 RCAA CTR 之登入代號。

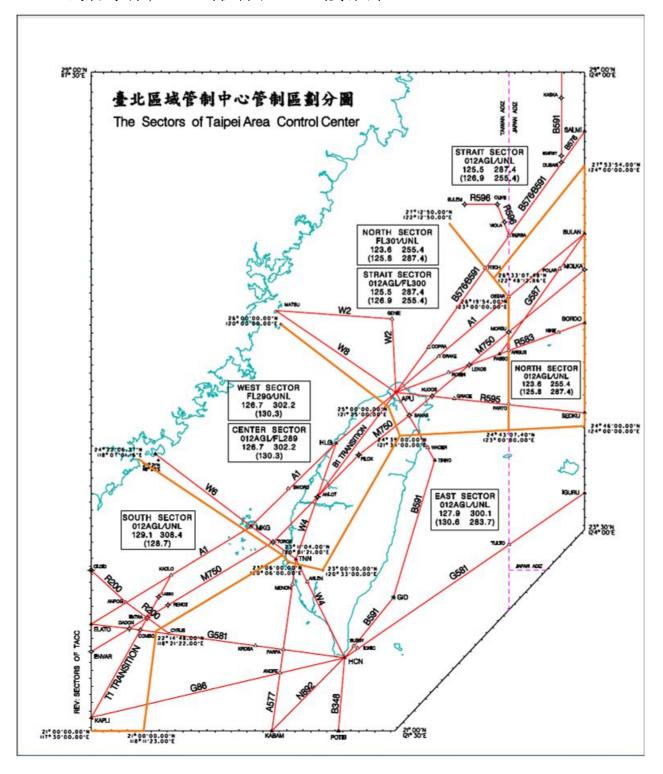
2.3.3.2. 區域管制席上線時,即應提供台北 FIR 全區之服務。2.2.3.1 劃分之席 位空域應依照民航局頒布之空域為之。若非全區服務,管制員得自行協調空 域交接位置。

台北區域管制 無線電呼號 Taipei Control						
席位名稱	使用代號	使用頻率	備註			
西部席	TPE_W_CTR	126.700				
海峽席	TPE_L_CTR	125.500				
北部	TPE_N_CTR	123.600	北區需切分時			
南部	TPE_S_CTR	129.100				
東部	TPE_E_CTR	127.900				

- 2.3.3.3. 區域管制席之管制空域為近場管制席管制空域外之所有航路區域。若該區域無近場管制席,應由區域管制席提供服務,並與該區域塔臺依照 2.2.2.5-2.2.2.7 條文進行協調。VIS 監控範圍請設定 150 浬。
- 2.3.3.4. 海峽席為北部副屬之空域,空域劃分於 A1 與 B576 航路之間,以東屬 北部、以西屬海峽席。
- 2.3.3.5. 區域管制席應與近場管制席協調交接位置及高度。交接高度應考量航機飛航路線以及距離機場之經濟高度為之。
- 2.3.3.6. 區域管制席應與鄰區區域管制席協調交接管之間隔。例如:同高度每

- 30 浬一架,或不分高度每15 浬一架。
- 2.3.3.7. 區域管制席發現飛往同一機場之到場航機數量過多時,得協調鄰區加 大隔離,或暫停接管到場航機。

2.3.4. 民航局頒布之區域管制中心空域劃分圖:



2.4. VRC 之系統交接與航管交接程序

- 2.4.1. 所有席位於管制航機時,應使用 F3 指令將航機進行 VRC 之系統接管 (TRACK),使得對該航機進行相關飛航資料修改。
- 2.4.2. 所有席位於交管航機或終止服務時,應使用 F4 指令交接(hand off、F4 席位代號)或終止(drop)該航機之 VRC 系統控制權。
- 2.4.3. 機場管制席劃分 DEL、GND、TWR 席位時,因 GND 不常使用系統操作, DEL 可協調 GND,直接將 VRC 系統管制權交接給 TWR,唯語音通信仍應 依照航管流程進行。
- 2.4.4. TWR 交接離場航機給 APP 或 CTR 時,不限制於 APP 或 CTR 接下 VRC 控制權後才能轉換頻道。但建議離場航機於起飛滾行開始時,即進行 VRC 系統交接,如此能達到提醒之功用。
- 2.4.5. APP 與 APP 間,或 CTR 與 CTR 間,或 APP 與 CTR 間,因 VRC 系統交管 同時代表雷達識別的交接,因此須在對方接受 VRC 之系統交接後,使得轉 換頻道。接管單位即不需告知航機 RADAR CONTACT。
- 2.4.6. 若實施系統交接後一會航機仍未聯絡,接管單位可嘗試廣播呼叫航機。若仍無法取得通信,則主動告知前一席位再換一次頻道。接管單位若發現航機即將進入空域、無潛在衝突,但前席位尚未交管時,得提醒前一管制單位進行交接。
- 2.4.7. APP 及 CTR 對於儀器進場以頒發進場許可之航機,不限制於 TWR 接下 VRC

控制權後使得轉換頻道。但仍建議儘早為之。

2.4.8. 因模擬飛行為單一飛行員操作,工作量較高,到場航機轉換頻道之位置儘量不要少於距離機場 10 浬。

2.5. SECTOR FILE 無標示機場跑道位置之管制服務

- 2.5.1. 目前使用之 2009 版 SECTOR FILE 內未標示跑道之機場計有: RCPO(新竹)、RCLG(水湳)、RCWA(望安)、RCCM(七美)、RCSQ(屏北)、RCDC(屏南)、RCQS(志航)。其中 WA、CM 為目視機場、QS 為無公告程序之軍方機場。LG、PO、DC 目前無民航機運作,但仍有 AIP 之舊資料可供飛行員參考。2.5.2. 當有航機請求與該機場飛航時,應以下述方法提供服務:
 - 2.5.2.1. 機場管制:可由周邊機場提供機場之飛航情報服務,並依照 2.1 頒發離場儀器航空器許可。不提供滑行及跑道之使用管制,僅提供航情諮詢。航機離場時請航機「report airborne(起飛報告)」。航機落地時請航機報告「report landed,或 report runway vacated」。若有已知狀態可告知「runway is clear」,但不得頒發降落許可。
 - 2.5.2.2. 近場管制(離場): 航機依照 SID 實施儀器離場或目視離場後,當雷達 識別後得依照一般航機管制。唯航機離場時,應注意周邊機場之相關航情。
 - 2.5.2.3. 近場管制(到場):因缺乏參考雷達底圖,因此近場席不得實施雷達引導排序進場。所有航空器維持於到場或進場程序飛航,於頒布之等待航線實施待命直到前機確認落地後,下一架航機使開始進場。航空器得於目視機場實施目視進場,或經飛行員請求取消儀器飛航,改為目視飛航,近場管制席或機場管制席則提供航情諮詢。

2.6. 天氣資料之提供

- 2.6.1. 本區目前可取得天氣資料之機場僅有 RCTP、RCSS、RCKH 等三座機場。管制員不得錄製上列三機場以外之 ATIS。
- 2.6.2. 因 SB4 或 FS Inn 所使用天氣於無天氣資料時,將呈現 VMC 之狀態,管制員應告知無該機場天氣資訊。唯 SB4 與 FS Inn 可能會擷取鄰近機場之天氣資料,管制員得提供周邊 50 浬範圍內之機場天氣資料作為參考。
- 2.6.3. 金門機場因鄰近廈門,得使用廈門機場(ZSAM)之天氣,馬祖得提供福州機場(ZSFZ)機場之天氣資料。唯需注意大陸所使用之風速單位為(METER PER SECOND)、高度為 METER。

2.7.ATIS 播報原則

VRC之ATIS分為文字與語音部分,為符合服務原則,規範ATIS播報權責如下:

2.7.1. 文字播報(Controller Info):

VATSIM 要求 Controller Info 不得超過 4 行,故請精簡輸入之文字,輸入 template 範例如下:

\$radioname(), \$myrealname
Information %id%: %runways% Winds \$wind(%icao%) Vis %vis% Sky
%clouds% Alt \$altim(%icao%)

RCTP RWY05 CLSD DUE WORK

2.7.2. 語音播報格式 Template(參照 ATMP 2-9):

airport,	, information,	zulu, expect	approach,
Runway,	(NOTAM about CLOSE	D RWY or TWY), Wi	nd
degrees	knots, Visibility	Kilometers(o	r meters
when lower than 5	000M), ()(weath	er condition, such as li	ght rain, fog),
Cloud	, Temperature	Dew Point	, QNH
Hectopascals, Dep	parture Frequency	(if APP or CTR i	n service),
Inform Al	PP or Tower on	initial contact you ha	ve information
<u> </u>			

2.7.3. ATIS 播報權責:

- 2.7.3.1. 塔台提供服務:依照當時開放席位狀況,播報權責陸續為 DEL> GND > TWR。僅需播報主要服務機場之 ATIS。播報席位應提供其他席位起始之 ATIS 報頭。
- 2.7.3.2. 無塔台服務:有 APP 時由 APP 播報服務機場 ATIS。若無 APP 服務, CTR 無須播報 ATIS,但依 2.6 提供天氣資訊,並得以文字提供。

3. 附錄

3.1. VATSIM code of conduct (節錄)

A. GENERAL RULES OF CONDUCT

- 1. Members should, at all times, be courteous and respectful to one another.
- 2. To use VATSIM, you must first register as a member of VATSIM at http://vatsim.net. Only registered members in good standing of VATSIM may fly online as a pilot and provide ATC as an air traffic controller.
- 3. The VATSIM identification number and password which is provided to you is your exclusive VATSIM membership identification. You may not give permission or knowingly allow your identification and password to be used by anyone else.
- 4. During the registration process and each time you log onto the VATSIM.net network you must use your real FULL NAME. Nick names, callsigns or abbreviations, except where used as callsigns, are not permitted.
- 5. During the registration process, you must provide a personal e-mail account for VATSIM registration purposes. You must also maintain the e-mail account you registered with in order to remain in good standing with VATSIM. This means that you must notify VATSIM membership staff of any changes. This will ensure that your VATSIM account information is kept up-to-date. Any e-mail address submitted to VATSIM will not be shared outside the VATSIM.net organization without your express prior permission. Failure to maintain your e-mail address is grounds for immediate revocation, without notice, of your account with the VATSIM.net network. The requirement to provide and maintain an ISP-based e-mail account may be waived at the sole discretion of the VATSIM.net Vice President of Membership.
- 6. You may register for and hold only one VATSIM registration and you may hold only one VATSIM identification number and password.
- 7. To log onto the VATSIM.net network, pilots must have downloaded and installed approved pilot client software and controllers must have downloaded and installed approved controller client software. Approved software is listed and a download link is provided on the VATSIM.net website. Each of these programs comes with operating instructions. In addition, there are many tutorials that have been developed which instruct in the use of these programs. Since flying and providing ATC are extremely intense activities, a person should become familiar in the basic use of these programs prior to logging on to the VATSIM.net network.
- 8. (a) Except as provided for by part (b) of this section, a member is permitted to make only one connection at any one time under his or her account number (CID) to the VATSIM.net network. Multiple connections, either as a pilot, controller or a

combination of the two are not permitted.

- (b) A controller logged on to the VATSIM.net network as a facility which is permitted to provide a Voice Automatic Terminal Information Service (ATIS) as provided for by Paragraph C(11) of the Code of Conduct may create a second connection using his or her CID for purposes of providing ATIS to pilots. The first connection shall be used as a "Controller" connection and the second connection shall be used exclusively as an "ATIS" connection. Under no circumstances may such a controller create more than two connections.
- 9. When logging on to the VATSIM.net network, a member is not permitted to leave his or her connection unattended for a period in excess of thirty (30) minutes. If a member is unable to comply with this requirement, then he or she must log off of the VATSIM.net network. A member who is found to be unresponsive for more than thirty (30) minutes is subject to immediate removal from the network. Members who are found to repeatedly leave their connections unattended are subject to the terms of Article VI. of the VATSIM.net Code of Regulations.
- 10. Since this is a learning environment, there are times when a pilot may encounter a new air traffic controller who is in the process of learning his airspace and/or general air traffic control procedures. The same may be true of the controller who may find himself issuing ATC to a pilot flying online for the first time. Everyone should remember to exercise patience and courtesy to these new pilots and controllers.
- 11. Members are prohibited from publishing, posting, distributing, disseminating or using any kind of defamatory, infringing, obscene, vulgar, profane, unlawful or other such types of communications materials or information through the use of online chat boxes, ATC text channels, voice ATC channels or the official internet forums, newsgroups and mailing lists utilized by VATSIM.net and its officially recognized regions, divisions, ARTCCs, ACCs and FIRs. Individuals violating this rule are subject to the procedures set forth in Article VI of the VATSIM.net Code of Regulations which could result in removal from VATSIM and revocation of their certificate number.
- 12. Members are prohibited from using online chat boxes, ATC text channels, voice ATC channels or the official internet forums, newsgroups and mailing lists utilized by VATSIM.net and its officially recognized regions, divisions, ARTCCs, ACCs and FIRs to threaten, harass, abuse, intimidate or stalk others or to otherwise violate the legal rights of others, including expectations to the rights of privacy and publicity. Individuals violating this rule are subject to the procedures set forth in Article VI of the VATSIM.net Code of Regulations which could result in removal from VATSIM and revocation of their certificate number.
- 13. VATSIM does not care to engage in the constant policing of its Members. If a

problem should arise online between two or more Members which cannot be resolved by the parties in a quick manner or if it affects the enjoyment of VATSIM by other Members or could hinder the operation of the network, the parties involved should check to see if a Supervisor or an Administrator is online to help resolve the matter. If any Members feel that the matter was not adequately resolved by the Supervisor or Administrator, then such member may submit his or her grievance in writing to the Vice President of Conflict Resolution. The decision reached by the Vice President of Conflict Resolution shall be final in all such matters.

- 14. Members may not log on to the VATSIM.net network with non-active callsigns for excessive periods of time. Non-active callsigns are defined as callsigns which are unrelated to any pilot, air traffic control position, instructor or designated staff engaging in administrative duties. This rule applies to cumulative periods of use of any type of non-active callsign. Members who violate this rule shall be subject first to a warning. Members who are found to repeatedly violate this rule are subject to the terms of Article VI. of the VATSIM.net Code of Regulations.
- 15. Members, without a right or privilege to do so, are prohibited from logging on to the VATSIM.net network with any pilot or air traffic control callsign and/or callsign suffix which is reserved for or generally used by Founders, Members of the Board of Governors, Members of the Executive Committee, Supervisors, Instructors or any staff members. In addition, Members without a right or privilege to do so are further prohibited from logging on with any callsign and/or callsign suffix which is intended to or will likely result in other Members believing such member is a Founder, member of the Board of Governors, member of the Executive Committee, Supervisor, Instructor or any staff member.

C. CONTROLLER'S CONDUCT

- 1. Controllers who are new to the hobby or are otherwise unfamiliar with an airspace should educate themselves, whenever possible, by first observing operations and/or studying procedures used in the region. Information is usually available at the appropriate regional web site and generally includes procedures, frequencies, appropriate positions and charts.
- 2. Controllers who choose to work in regions other than the one they requested assignment to must follow the rules and procedures in effect for such regions.
- 3. When logging onto VATSIM as an observer, an individual should have a callsign which ends as follows: "_OBS". Prior to the underscore an individual may use any letters such as initials or airport identifiers. By logging on as an observer, an individual must not communicate on any open text or voice frequency with pilots. In other words, an observer is prohibited from providing air traffic control services. They are restricted to observing operations. An observer who provides air traffic

- control services is subject to removal from VATSIM and revocation of his or her certificate number.
- 4. In general VATSIM recognizes the following abbreviations for air traffic control positions. These abbreviations are to be preceded by either the three or four letter identifier for the airspace:
 - a. XXX DEL Clearance Delivery
 - **b.** XXX GND Ground Control
 - **c.** XXX TWR Tower Control
 - **d.** XXX DEP Departure Control
 - **e.** XXX APP Approach Control
 - **f.** XXX_CTR Enroute (Center) Control

These abbreviations may be modified, amended and otherwise added to by local Centers, Flight Information Regions or divisions to reflect common ATC practice and procedures utilized in those local areas. Controllers should not utilize any abbreviations not generally accepted by VATSIM or not used at the local level.

- 5. Positions are occupied on a "first come" basis. If the position a controller wants to work is already occupied, then another position should be found. From time to time, a controller who has occupied a particular position may lose his or her connection to the VATSIM network or to the internet. If another controller takes such a position and thereafter the original controller logs back on and advises that he or she had lost their connection, the second controller should relinquish the position to the original controller.
- 6. A local division and/or region may restrict certain positions in general or during specific times to those controllers who have achieved a particular rating. Controllers should consult the local rules to see if they qualify to work a particular position prior to logging on at such a position.
- 7. Controllers should only use the frequencies which are authorized for use at their particular position by the particular division or region in which they are working.
- 8. Voice is the preferred method of communications on VATSIM. However, not all pilots use voice to communicate with ATC. When using VATSIM, a controller must at all times be prepared to provide text-based air traffic control services to a pilot. Controllers must never restrict themselves to only working with voice capable pilots.
- 9. Controllers should not carry on private conversations between themselves, pilots or other individuals on the active communication frequency, the ATC channel or on the "guard" frequency (121.50). This interferes with providing ATC services to other pilots. The guard frequency should only be utilized in cases of emergency and under no other circumstances. Controllers are encouraged to use private chat boxes for carrying on private conversations.

- 10. Since voice is the preferred method of communications on VATSIM, all controllers, regardless of their ATC rating, are encouraged and permitted to use voice whenever possible. There shall be no rules preventing or otherwise restricting the use of voice by air traffic controllers. Pursuant to Code of Conduct Rule C(8) above, all controllers must be prepared to provide text-based services to pilots who so desire and no pilot may be denied such service for any reason.
- 11. Voice Automatic Terminal Information Service (ATIS). As provided for in Paragraphs A(8)(a) and (b) of the Code of Conduct, a controller is permitted to create a second connection to the VATSIM network using his or her CID for the sole purpose of providing voice ATIS to pilots. A controller wishing to provide voice ATIS MUST meet each of the following requirements:
 - (a) The controller must have an S1 rating or higher;
 - (b) An ATIS may be created only for facilities which have a real-world ATIS;
 - (c) There must be a controller providing local control (tower) services at the field for which the ATIS is being created. This can be an overlying center or approach controller;
 - (d) There can be only one voice ATIS per controller and the recording must be limited to one airport;
 - (e) The maximum length of the voice ATIS must not exceed one minute and the only audible sound must be the controller reading the ATIS. In addition, the controller must provide only that essential information which is typically found in a real world ATIS for the location. This would include weather, active runways and operational information directly relevant to pilots operating at the field. Controllers are expressly prohibited from providing any other non-relevant information including, but not limited to, event announcements or personal information about the controller or others:
 - **(f)** Whenever a controller chooses to create a voice ATIS, he or she must also provide the same information in the form of a text ATIS; and
 - (g) A controller may provide a voice ATIS in his or her native language. However, if a controller chooses to do so, then the required text version of the ATIS must provide the same information in English.

Remember, the primary goals of VATSIM are to educate, to provide a realistic simulation of flying and air traffic control and, most importantly, to provide a fun environment for everyone to enjoy our hobby. By following the simple rules set forth in this Code of Conduct, everyone is ensured of learning and making new friends from around the world.

Enjoy!

-VATSIMRev. 01/09